NOAA Style and Content Guidelines for the World Wide Web:

Section 1: Purpose and Scope

February 1, 1998

1.1 Purpose and Scope of this Document

This document has been created to provide basic guidelines for development of World Wide Web (WWW or "the Web") electronic documents within NOAA. Its development has been motivated by several factors:

- The need for an appropriate visual design protocol for NOAA in order to achieve a corporate "look and feel"
- The desirability of establishing a minimum set of quality control standards for WWW server information
- The necessity for a basic framework for guiding the computer user through the complex body of linked information on NOAA's servers

The document is not intended to spell out detailed style guidelines and standards for developing Web documents. The reader is referred to Section 1.3 for a short list of such guidelines documents and the many others available either on the Web or as printed documents. Rather, the style and content guidelines in this document are intended to identify the basic elements constituting a NOAA corporate presence on the Web.

It is important to recognize that the Web is a rapidly evolving medium both in terms of technological capability and information content. As a result, this document is necessarily transitory in nature and requires periodic review and update in concert with Web evolution.

This document is the product of the NOAA Web Advisory Working Group (NWAWG) which was established as a NOAA-wide entity by the Deputy Under Secretary (DUS) for the purpose of coordinating Web information development across the many elements of the agency.

The World Wide Web has rapidly become a prominent feature of the NOAA communications environment, particularly in the way that we reach the general public. Increasingly, it represents the "front door and welcome lobby" for a wide spectrum of people interested in our organization and its services. This public includes students at every level, educators, researchers, legislators, professionals in related fields, and ordinary citizens interested in the information on myriad topics offered by NOAA on the World Wide Web.

Because it has become such a public place, NOAA's face on the Web now must adequately reflect our organizational identity and how that is expressed in all of our relationships-- internal and external. Today, NOAA's web sites communicate who we are to the rest of the Internet universe. This is an important and rapidly growing element of how people relate to us. And (to emphasize the obvious) the universe of people who connect to us on the Web is extremely important to us.

Users need predictability and structure, with clear functional and graphic continuity among the various components and subsections. Banner graphics, signature icons, button bars, and other graphic devices can be very useful in reinforcing domain identity within subsections of a Web site. A carefully organized NOAA user interface will clarify and reinforce Web site structure, and ease the user's cognitive load in a new and complex Web site.

1.2 Universal Access

A critically important consideration when creating on-line documents is the capability of the intended audience to view the content of the document. Users may be limited by physical disability or by technological limitations of their computer, software, or Internet connectivity. Consequently, it is important to take such considerations into account when designing a Web service. For example, a person with visual impairment will not be able to see a highly graphical rendering of information and, therefore, should be provided with an alternate text description. Similarly, users with low data-rate connectivity to the Internet will have difficulty utilizing information services that are highly dependent on large graphics and animation. This is not to say that we should design to the "least common denominator," but rather that we must provide alternatives that ensure universal access.

An excellent source of information on accessibility issues and guidelines to developing accessible Web pages is available from the World Wide Web Consortium (http://www.w3.org/WAI/)

1.3 Reference Style Guides

Much of the material in this document is based upon other commonly available documents on Web presentation style. The reader is referred to the following for in-depth coverage of the subject matter.

Yale Style Manual

(http://info.med.yale.edu/caim/manual/contents.html)

Sun Microsystems

(http://www.sun.com/styleguide/tables/Welcome.html)

World Wide Web Consortium

(http://www.w3.org/pub/WWW/Provider/Style/Overview.html)

NSF/NCSA World Wide Web Federal Consortium

(http://skydive.ncsa.uiuc.edu/cybrary/2/guidelines/)

1.4 Definitions

For the purposes of this document the following definitions apply:

1) "Web page" refers to any logical grouping of electronic text and/or graphical material accessed by the user from a Web server and rendered on his computer monitor by any one of a number of
commercial or public-domain Web browsers.

2) "Home Page" refers to a Web page that is the highest level of a hierarchy of electronic documents accessible by the user with a Web browser. This is sometimes referred to as a "Welcome Page" by some organizations.

3) "Supporting pages" are any Web pages that expand upon the information content of the Home Page and are electronically invoked from the Home Page or from other supporting pages.

1.5 Categorization of Home Pages

In order to minimize restrictions on developers while, at the same time, striving for a NOAA corporate "look and feel," two categories of Home Pages are defined in this document. Requirements and guidelines for Category 1 Home Pages are more constraining than for Category 2--the rationale being that Category 1 pages, taken as a group, define for the public NOAA as an organizational entity whereas Category 2 pages do so to a considerably less extent.

The discussion of style and content guidelines has been divided into two parts:

1) Category 1 Home Page are those Web documents that represent the upper-level pages in NOAA, i.e., NOAA Home Page and LO Home Pages. The requirements for these are more constraining than for Category 2 pages.

2) Category 2 Web pages are those Web documents that describe lower organizational level elements of NOAA, i.e., organizational components within the LOs, special projects, e.g., El Nino Theme Page; or special services, e.g., NOAA Locator. A less constraining set of guidelines apply to Category 2.

1.6 Summary of Minimum Style and Content Elements

The following two sections summarize the minimum set of style and content elements for Categories 1 and 2 Web pages (See Attachment 2 for a sample implementation of a Category 1 home page). More detailed descriptions of these elements are provided in later sections of this document.

1.6.1 Category 1 Pages

1. Header (banner) on first page containing standard NOAA icon, "National Oceanic and Atmospheric Administration" spelled out, the name of the organization spelled out, iconic representation of the organization (e.g., NWS icon).

2. HTML title tag that adequately describes the function of the Web document to search engines such as Alta Vista, Yahoo, etc.   Also, the META tag with appropriate keywords should be used to provide information to such search engines.

3. Footer (or link to footer information) on first page, containing postal address and electronic mail address for public access.

4. Each graphic must have an ALT attribute with the associated IMG tag with text that describes the content of the graphic.

5. A brief statement of the mission and function of the office providing the information services.

6. Hyperlinks to each of the other five special high-level home pages or hyperlink to a page that contains those links.

7. Hyperlinks to the NOAA Home Page, NOAA Personnel Locator, and to one or more data and information search engines.

8. Date of last revision of the Web document.

9. URL of the home page.

1.6.2 Category 2 Home Pages

1. Header (banner) on the first page identifying it with the fully spelled out name of the office, project, or function with which it is associated, icon of the major organizational element with which it is associated (e.g., LO).

2. HTML title tag that adequately describes the function of the Web document to search engines such as Alta Vista, Yahoo, etc. The META tag with descriptive keywords should also be used to ensure visibility to such search engines.

3. Footer (or link to footer information) on first page, containing postal address and electronic mail address for public access.

4. Brief description of the function or purpose of the logical aggregation of the Web pages.

5. Identification either in the header or footer of NOAA affiliation.

6. Hyperlinks to NOAA Home Page and LO Home page (for multiple-LO sponsored activities, hyperlinks to each of the participating LO Home Pages).

7. Date of last revision of the electronic document.

8. URL of the home page.

1.7 Summary of Desirable Non-Mandatory Content for Web Documents

The following list identifies elements of NOAA Web documents that are desirable, but not mandatory, to include. A more detailed description of these is provided in later sections.

1. Name and method of contact for individual(s) responsible for the Web document.

2. ALT attribute to the IMG tag to support text-only viewing.

3. Map of or written directions to organization sponsoring the Web pages.

4. HTML form allowing users to enter comments.

5. Hyperlinks to NOAA Locator and to NOAA Public Affairs Home Page.

6. List of frequently asked questions (FAQ).

7. Link to an acronym list.

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Section 2: Content and Style Guidelines for Category 1 Pages

February 1, 1998

2.1 Definition of NOAA Category 1 Home Page

Category 1 home pages are defined as the NOAA Home Page and the Line Offices home pages of NWS, NESDIS, NMFS, NOS, and OAR.

2.2 HTML Version

All Category 1 home pages and their supporting Web pages must allow access by browsers supporting the most recent World Wide Web Consortium HTML recommendation (see http://www.w3.org/) to ensure that they are readable by the widest possible audience. In addition, Category 1 pages are required to have a minimum-graphics or text-only versions for users with slow connection speeds or visual disabilities.

2.3 Page Length and Scrolling

As a rule of thumb, Category 1 home pages should contain no more content than would normally fit on three 8-1/2 X 11 inch printed pages. This is desirable for two reasons:

1) to limit the amount of time the user is required to wait for the download

2) to limit the amount of scrolling necessary on introductory pages

The developer should make use as much as possible of hyperlinks to increasingly detailed information rather than relying on scrolling.

An effective navigational aid for particularly long documents is to build a table of contents whose elements are hyperlinked into the document sections. Judiciously placed button icons or hypertext at the beginning and end of each section may be used to allow the user to jump to the "top" or "bottom" of the document and to the "previous" or "next" page of the section.

2.4 Document Headers

2.4.1 Supporting Text-Only Viewing

At minimum all Category 1 Web pages must provide the capability to view content with text-only browsers (e.g., Lynx or Web browsers with graphics turned off). This

implementation may be accomplished either by providing a text-only version of the HTML (and a hypertext link to that document) or by use of the ALT attribute with each graphic, IMG, tag; the attribute must have an adequate text description of the content within the graphic.

2.4.2 Graphical Header

A design scheme is established (see Attachment 2) for all header graphics. As a general guideline to minimizing user download times, aggregate graphic image size for Category 1 home pages should not exceed approximately 50 kilobytes per document; large graphics, while providing visual appeal, will tend to discourage user access as download times approach a minute or longer.

All the header graphics should have common elements in terms of design layout and color palette readily identifying them as NOAA home pages which must include the NOAA icon, the sponsoring organization's icon (if one exists), "National Oceanic and Atmospheric Administration" spelled out, and the sponsoring organization's name spelled out.

2.4.3 Text-Based Header

Text-based versions of Category 1 pages will have placed at the top of the page, a string of text (standard paragraph size or italics) identifying the Web page's sponsoring office as it is represented in the hierarchy of the NOAA organization. For example, The Office of Coast Survey would have: "U.S. Department of Commerce/NOAA/NOS/Office of Coast Survey"

Whether to spell out the office's full name or to use acronyms is at the Webmaster's discretion. This string should also provide links to the appropriate offices in the hierarchy

2.5 Document Body

There are no special restrictions on what appears in the body section of a Category 1 page. It is recommended that it be kept as concise as possible; developers should refrain from using large graphic images (e.g., aggregate document size of greater than 50 kilobytes) that may hinder access by users with slow Internet connections.

2.6 Document Footers

Footers, the elements at the bottom of WWW pages, are extremely important in identifying the origin, authorship, author contact information, and last revision date of the page, and are often the best place to locate local links to your home page.

The footer content may be implemented either explicitly or as a hyperlink to a supporting Web page containing the required footer information. The following elements must appear in the footer section of a Category 1 page in the described order.

2.6.1 Horizontal List/Button Bar

Immediately following the body section, a list of standard links must be provided that may be implemented as a list of specific text-based hyperlinks. The list should not contain more than 8 choices (preferably fewer). The first five choices are listed below and should be displayed in order from left to right:

- NOAA Home (link to NOAA Home Page, http://www.noaa.gov/)

- NOAA organizational and personnel directory (link to NOAA organization and personnel locator, http://www.rdc.noaa.gov/rdc/natloc.html)

- Search NOAA databases (link to NOAA-wide database search engine, http://www.esdim.noaa.gov/NOAAServer)

- Search NOAA Web pages (link to NOAA-wide search engine, http://www.websites.noaa.gov)

- Public announcements (e.g., links to NOAA Public Affairs and/or organizational public announcements, http://www.noaa.gov/public-affairs/)

The remaining choices are at the sponsoring office's discretion. For example:

[NOAA Home][Personnel Locator] [Databases Search][Web Pages Search] [Directory] [Announcements] [Option1] [Option2] [Etc.]

Additionally, a button bar following the same protocol for links may be fixed immediately after the body of the page . The button bar should follow the same graphic scheme, in terms of color palette, as the header graphic.

2.6.2 NOAA Icon and Organization Address

A Category 1 page will provide (italicized) the organization's name, street address (for main office) and city, state, and zip code. A contact telephone number is optional but desirable.

2.6.3 Contact e-mail address

A Category 1 page must provide a minimum of one contact Internet e-mail address for feedback on Web page information content.

2.6.4 Revision Date

All Web pages, which as a group constitute an electronic document, should contain the date of the most recent revision in the footer. The date shall be left justified and in the format:

<month written out> <numeric calendar number>,<four digit calendar year number>

For example, March 13, 1998 is an acceptable format.

2.6.5 Page URL

The URL of the page should be the last item displayed in the footer of the Home Page and is also left justified. The purpose of this URL is to provide authentication of documents that are derived from NOAA servers and printed by the user.

2.7 Color and Background

Category 1 pages should allow the default settings of the user's browser. The sparing use of bright colors for emphasis is allowed, but only insofar as it does not interfere with the readability of the text. Textured backgrounds should be avoided as they tend to impair readability.

2.8 Graphics and Images

By its very nature, the Web is a visual medium. At the same time, failure to use good judgment in creating highly graphical Web pages can frustrate the intended audience and render the Web site's information content effectively inaccessible. A balance must be struck between creating visually pleasing Web pages and the conveyance to the user of the intended information content.

All Web pages and particularly the Category 1 home pages should be designed to be universally accessible. Most users have relatively slow connections to the Internet--far slower, for example, than do most NOAA facilities. (For most NOAA Web sites, many or most users enter via one of the popular Internet service providers (e.g., America Online) using a modem rather than the higher data rate direct network connection.) Graphical displays, while being visually pleasing, may in fact prevent most users from getting to the information content. The main reason is that some graphics may take well over one or two minutes for users to download. From an ergonomic standpoint this is unacceptable and, in fact, anything requiring more than 30 seconds to download should be highly suspect. Similar arguments apply for audio clips and video clips.

For Category 1 pages, long download times are acceptable only when the particular medium is necessary to convey the intended information content. For example, a very popular Web site in the recent past has been NASA's Pathfinder site with photos from

Mars available on NASA Web servers in near-real-time.   Typically these photos required several minutes to download over the Internet; this download time is acceptable since there was no other way to convey the information content. However, it would have been unacceptable if it were required initially for the user to download a large introductory graphic, sound clip, or video clip prior to intiating downloading of the Mars imagery.

To ensure accessibility of the intended information on NOAA Web sites, a few simple rules apply:

1) Use of graphics should to be limited to approximately 50 kilobytes, in aggregate, per electronic document, except when there is no other way to convey the intended information.   Introductory graphics, sound clips, or video clips of size exceeding this guideline are unacceptable.

2) Use of "thumbnail" images with links to the full images is strongly encouraged for exceptionally large graphics. This gives the user discretion to choose to wait for a download or to ignore the graphic.

3) Each graphic must be accompanied by an ALT attribute to the IMG tag with text that adequately describes the content of the graphic for users not displaying graphics with their browsers.

4) Pages should be designed so that they are visually pleasing on 256-color screens (8-bit color).

5) Text appearing in graphics should be readable; text that becomes unreadable because of pixel resolution constraints should be avoided.

2.9 Title Tag

When creating an HTML document, the title of that document is of critical importance from the point of view of electronic search mechanisms. Web search engines such as "Yahoo" and "Alta Vista" return the title of the document when a "hit" occurs. Since, literally hundreds or thousands of titles may be returned for such a search, it is important that the title of each NOAA HTML document be highly descriptive of the information content of that document. A descriptive title tag is critical from the user's viewpoint in facilitating the search for information. In the absence of an adequately descriptive title tag, the user may be left to wonder why that document was even hit and may discourage further exploration of its content.

2.10 Use of NOAA Icon

A standard NOAA icon will be used where appropriate.

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Section 3: Content and Style Guidelines for Category 2 Pages

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3.1 Definition of NOAA Category 2 Home Page

Category 2 home pages are Web documents sponsored by an official NOAA organization that is one organizational level below the Line Office. The list of current or future home pages corresponding to the Category 2 definition is presented in Attachment 1.

The guidelines for Category 2 Web pages is intentionally less restrictive than for Category 1. This is in the interest of minimizing the number of constraints that may inhibit creative development of new Web page designs as the technology develops.

In the interest of promoting a well-defined NOAA organizational presence on the Web, offices owning Category 2 page are strongly encouraged (though not required) to follow the more restrictive Category 1 design and content guidelines.

3.2 HTML Version

Category 2 Web pages may use non-standard HTML, audio, and Java features as seen fit by the sponsoring organization. In such cases, the developers are encouraged to identify pages as such, and should clearly indicate the HTML version being utilized and the Web browsers (along with their version numbers) that will properly render the display. Inasmuch as is practicable, the developer should implement electronic means that detect the user's browser capabilities and inform the user that he will be unable to exercise the special advanced features of that page.

3.3 Page Length

There are no specific page length requirements for Category 2 pages; however, webmasters should use good judgment when balancing the editorial demands of content versus page length. Once again, recommendations outlined for Category 1 pages should be considered as guidelines for limiting page length for Category 2 pages.

3.4 Document Headers

3.4.1 Supporting Text-Only Viewing

Developers of Category 2 home pages should provide the capability to view content with text-only browsers (e.g., Lynx or Web browsers with graphics turned off). This

implementation may be accomplished either by providing a text-only version of the HTML (and a hypertext link to that document) or by use of the ALT attribute with each graphic, IMG, tag; the attribute must have an adequate text description of the content within the graphic.

3.4.2 Graphical Header

Category 2 home pages must clearly identity the sponsoring organization in the header or banner and its affiliation with NOAA or the Line Office. The name of the organization should be spelled out and the organization's affiliation can be indicated by use either of a standard Line Office icon or a standard NOAA icon.

3.4.3 Text-Based Header

It is recommended that developers follow the same guidelines for Category 2 pages as for Category 1 with respect to text-based headers. If developers choose not to follow Category 1 text-based page header guidelines, it is recommended that they have placed at the top of the page, a string of text (standard paragraph size or italics) identifying the Web page's sponsoring office as it is represented in the hierarchy of the NOAA organization. For example, The Pacific Marine Environmental Laboratory Home Page would display "U.S. Department of Commerce/NOAA/OAR/ERL/PMEL"

Whether to spell out the office's full name or to use acronyms is at the developer's discretion. It is also suggested to use this string to provide links to the appropriate offices in the organization's hierarchy.

3.5 Document Body

There are no special requirements for the body of Category 2 pages.

3.6 Document Footers

3.6.1 Button Bar/Horizontal List of Links

A Category 2 site may provide a horizontal list of links by providing a solid line after the body of the Home Page followed by minimum graphics or text only links. For example:

[NOAA Home Page][LO Home Page][Personnel Locator][Databases Search]
[Web Pages Search][Directory] [Announcements] [Option 1...]

Note Category 2 Web page developers may place the elements of the following sections (3.6.2 to 3.6.4) onto a separate "credits" page with a link from the appropriate Home Page.

3.6.2 NOAA Icon and Organization Address

A Category 2 Home Page will provide (italicized) the organization's name, street address (for main office) and city, state, and zip. A contact telephone number is desirable but optional. Immediately to left of the address, it is recommended that a standard approximately 60 x 60 pixel NOAA icon be inserted.

3.6.3 Contact Address / Page Author

A Category 2 page must provide at minimum one contact Internet address for feedback on Web page content and layout. Inclusion of the authors' names is encouraged but not required. This element must also be left justified.

3.6.4 Revision Date

All home pages must contain the date of the most recent revision in the footer. The date should be left justified and in the format:

<month written out> <numeric calendar number>,<four digit calendar year number>

e.g., November 7, 1998.

3.6.5 Page URL

The URL of the page should be the last item displayed in the footer of the home page for authentication purposes.

3.7 Color and Background

There are no special color or background requirements for Category 2 pages.

3.8 Graphics and Images

In building Category 2 Web pages, developers should carefully consider the simple guidelines and rules outlined in Section 2.8 for Category 1 pages. It is recognized that many home pages falling into Category 2 utilize potentially "cutting edge" features of Web servers and browsers. Developers, however, should keep in mind the technological capabilities of their intended user audience and should make every effort to accommodate alternative methods of user interaction.

3.9 Title Tag

When creating an HTML document, the title of that document is of critical importance from the point of view of electronic search mechanisms universally available to users on the WWW. Web search engines such as "Yahoo" and "Alta Vista" return the title of the document when a "hit" occurs. Since, literally hundreds or thousands of titles may be

returned for such a search, it is important that the title be highly descriptive of the information content of the HTML document. Otherwise, the user may be left to wonder why that document was even hit.

3.10 Use of NOAA Icon

To encourage recognition of Web pages as elements of NOAA, a standard NOAA icon should appear where appropriate.

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Attachment 1: Category 1 and 2 Home Pages

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CATEGORY 1 HOME PAGES

The following are defined as Category 1 Home Pages: The NOAA Home Page and the home page of each of the NOAA Line Offices-- National Weather Service, National Marine Fisheries Service, National Ocean Service, Oceanic and Atmospheric Research, and National Environmental Satellite, Data and Information Service.

CATEGORY 2 HOME PAGES

Category 2 Home Pages are the organizational home pages below (currently in existence or potentially to be developed), corresponding to elements of NOAA Headquarters and the next organizational element below the five NOAA Line Offices.

NOAA Headquarters

Office of the Under Secretary/Administrator
Office of Public and Constituent Affairs
Office of Sustainable Development and Intergovernmental Affairs
Office of Policy and Strategic Planning
Office of Legislative Affairs
Office of Education Affairs
Office of International Affairs
General Counsel
Office of NOAA Corps Operations
Systems Acquisition Office
Program Coordination Office
NOAA Coastal Ocean Program Office
Office of High Performance Computing and Communications
Office of Global Programs
Office of Finance and Administration
Central Administrative Support Center
Eastern Administrative Support Center
Mountain Administrative Support Center
Western Administrative Support Center

NESDIS

Environmental Information Services
International and Interagency Affairs Office
NPOESS Integrated Program
National Climatic Data Center
National Geophysical Data Center
National Oceanographic Data Center
Office of Systems Development
Office of Satellite Operations
Office of Research and Applications
Office of Satellite Data Processing and Distribution

NMFS

Office of Operations, Management And Information
Office of Science and Technology
Office of Protected Resources
Office of Sustainable Fisheries
Office of Habitat Conservation
Office of Enforcement
Office of Trade and Industry Services
Office of Intergovernmental and Recreational Fisheries
Alaska Region
Northeast Region
Northwest Region
Southeast Region
Southwest Region

NOS

Coastal Services Center
Office of Coast Survey
Office of National Geodetic Survey
Office of Aeronautical Charting And Cartography
Office of Ocean and Coastal Resource Management
Office of Ocean and Earth Sciences
Office of Ocean Resources Conservation and Assessment

NWS

National Data Buoy Center
National Weather Service Training Center
National Centers for Environmental Prediction
Office of Hydrology

Office of Meteorology
Office of Systems Development
Office of Systems Operations
Alaska Region
Central Region
Eastern Region
Pacific Region
Western Region

OAR

Environmental Research Laboratories
Programs Office
Laboratories
Office of Oceanic Research Programs
National Sea Grant College Program

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Attachment 2: Sample Line Office Home Page

National Oceanic and Atmospheric Administration

MISSION

The National Environmental Service (NES) is a component of the National Oceanic and Atmospheric Administration (NOAA) responsible for …..

SERVICES

Monitoring of environmental changes.

Protecting endangered species.

Mapping the ocean floor.

Etc.

Other main components of NOAA are:

- National Ocean Service
- National Environmental Satellite, Data and Information Service
- National Weather Service
- National Marine Fisheries Service
- Oceanic and Atmospheric Research

[NOAA Home] [Personnel Locator] [Directory] [Databases Search] [Web Pages Search] [Announcements]

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